UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/885,911	06/22/2001	Takahiro Ikeda	107307.01	6824

25944 7590 04/21/2005

OLIFF & BERRIDGE, PLC
P.O. BOX 19928
ALEXANDRIA, VA 22320

EXAMINER	
WORKU, NEGUSSIE	
ART UNIT	**PAPER NUMBER**
2626	

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/885,911	IKEDA, TAKAHIRO	
	Examiner	Art Unit	
	Negussie Worku	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 February 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 8-14* is/are rejected.

7)☐ Claim(s) *2-7* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. In response to the office action dated November 26, 2004, since applicant's parent Application No.09/707,956 has been expressly abandoned, the double patenting have been over come.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 and 8-14 is rejected under 35 U.S.C. 102(e) as being anticipated by Ohtani et al. (USP 6,084,692).

With respect to claim 1, Ohtani et al. disclose image scanning apparatus (an image forming apparatus of fig 1), comprising: an illuminating device, (LED light sources 13, 14, 15 of fig 1 for illuminating original) which irradiates illumination, see (col.3, lines 1-10); an image sensor, (reading sensor 12 of fig 1 or 7) which outputs signal charges as image data of the original, (original 201 of fig 2) including a light receiving part for

receiving light, in which the light is an illumination irradiated from said illuminating device (LED light sources 13, 14, 15 of fig 1 for illuminating original), and influenced by an original, (original 201 of fig 2) and includes a transferring unit (A/D conversion unit 701 of fig 7) for transferring signal charges generated at the light receiving part, see (col.10, lines 33-37); and a controlling device, (CPU 1 of fig 1, in conjection with timing counter 703 of fig 7, for controlling the lighting time of light source, see col.8, lines 15-20), which instructs said illuminating device (LED light sources 13, 14, 15 of fig 1) to irradiate illumination, see (col.3, lines 1-10), and directs a timing to transfer signal charges to said transferring unit (A/D converter 701 of fig7) under a predetermined condition, see (col.10, lines 35-55).

With respect to claim 8, Ohtani et al. disclose image scanning apparatus (an image forming apparatus of fig 1), comprising: an illuminating device, (LED light sources 13, 14, 15 of fig 1 for illuminating original) which irradiates illumination, see (col.3, lines 1-10); an image device, (reading sensor 12 of fig 1 or 7) for reading out signal charges from a light receiving part and outputting said signal charges as image data of the original, (original 201 of fig 2) including said light receiving part for receiving light and for generating said signal charges, (sensor 12 of fig 2, for receiving light and generating image signal) in which the light is an illumination irradiated from said illuminating device (LED light source 13,14 and 13 of fig 7) and influenced by the original (original 201 of fig 2); and a controlling device, (CPU 1 of fig 1, in conjection with timing counter 703 of fig 7, for controlling the lighting time of light source, see col.8, lines 15-20), for directing

said illuminating device to irradiate illumination, see (col.9, lines 37-43) directing said imaging device (image sensor 12 of fig 7) to read out the signal charge generated by said light receiving part, (original 201 of fig 2), prohibiting illumination from irradiating in said illuminating device while image data of the original is output from said imaging device, (as discussed in col.9, lines 60-68, a step S802 discriminates whether a color or a monochromic copy operation is selected, and in case of color operation step S803 of fig 8, sets the light mode as to turn on the RGB light source and incase of monochromic turn of RB and turn on the G light source only).

With respect to claim 9, Ohtani et al. disclose image scanning apparatus (an image forming apparatus of fig 1), wherein said imaging device has a line sensor comprising a plurality of light receiving parts arranged in one dimension, (image reading sensor 12 of fig of fig 7, consisting of a line sensor, see col.2, lines 66-67) a charge-to-voltage converter (conversion circuit 701 of fig 7) which converts signal charges to voltages and outputs the voltages, (signal is outputted from sensor 12 of fig 7, by converter 701 of fig 7) a charge readout part which reads out signal charges generated by said light receiving parts, (original receives light from light source) and a charge transfer part (line sensor 12 of fig 1 or 7) which transfers signal charges read out by said charge readout part to said charge-to-voltage converter, (conversion circuit 701 of fig 70 and outputs image data of the original for every line while moving at least one of said line sensor (line sensor 12 of fig 7, see col.2, lines 66-67), and original in a direction orthogonal to the direction said light receiving parts are arranged in and said controlling

device (CPU 1 of fig 1, in conjection with timing counter 703 of fig 7, for controlling the lighting time of light source, see col.8, lines 15-20), directs said charge readout part to periodically read out one line of the signal charges generated by said light receiving part, and prohibits illumination from irradiating in said illuminating device while said signal charge is converted to a voltage by said charge-to-voltage converter and then output as image data of the original, (a step S802 discriminates whether a color or a monochromic copy operation is selected, and in case of color operation step S803 of fig 8, sets the light mode as to turn on the RGB light source, and incase of monochromic turn of RB and turn on the G light source only, see (col.9, lines 60-68).

With respect to claim 10, Ohtani et al. disclose image scanning apparatus (an image forming apparatus of fig 1), wherein said imaging device (image sensor 12 of fig 7) at least outputs signal charges generated by said charge-to-voltage converter (conversion circuit 701 of fig 7) as invalid data that does not correspond to image data of the original, while illumination is irradiating from said illuminating device (plurality of LED light source 13, 14 and 15 of fig 7).

With respect to claim 11, Ohtani et al. disclose a recording medium which stores an image scanning program (according to the program stored in a personal computer 1302 of fig 17, the image forming apparatus of fig 7, is controlled) which causes a computer to execute the step of: controlling an image scanning apparatus (fig 7) having an illuminating device (light source 113,14 and 15 shown in fig 7) for irradiating

illumination on an original (original 201 of fig 2) and an imaging device (line sensor 12 of fig 7) for reading out signal charges from a light receiving part and outputting said signal charges as image data of the original, (original 201 of fig 2) including said light receiving part for receiving light and for generating said signal charges, in which the light is an illumination irradiated from said illuminating device (LED light sources of fig 7) and influenced by the original (original 201 of fig 7); wherein said controlling step includes a controlling procedure for directing said illuminating device to irradiate illumination, see (col.16, lines 25-30), directing said imaging device (image forming device 1301 of fig 17), to read out the signal charge generated by said light receiving part, (image sensor (CCD) of fig 7), and prohibiting illumination (switch of or turn of RB, see below) from irradiating in said illuminating device while image data of the original is output from said imaging device, (a step S802 discriminates whether a color or a monochromic copy operation is selected, and in case of color operation step S803 of fig 8, sets the light mode as to turn on the RGB light source, and incase of monochromic operation LED (RB) are turned of and turn on the (LED) G light source only, see (col.9, lines 60-68).

With respect to claim 12, Ohtani et al. disclose image scanning apparatus (an image forming apparatus of fig 1), wherein said imaging device has a line sensor comprising a plurality of light receiving parts arranged in one dimension, (image reading sensor 12 of fig of fig 7, consisting of a line sensor, see col.2, lines 66-67) a charge-to-voltage converter (conversion circuit 701 of fig 7) which converts signal charges to voltages and outputs the voltages, (signal is outputted from sensor 12 of fig 7, by

converter 701 of fig 7) a charge readout part which reads out signal charges generated by said light receiving parts, (original receives light from light source) and a charge transfer part (line sensor 12 of fig 1 or 7) which transfers signal charges read out by said charge readout part to said charge-to-voltage converter, (conversion circuit 701 of fig 70 and outputs image data of the original for every line while moving at least one of said line sensor (line sensor 12 of fig 7, see col.2, lines 66-67), and original in a direction orthogonal to the direction said light receiving parts are arranged in and said controlling device (CPU 1 of fig 1, in conjection with timing counter 703 of fig 7, for controlling the lighting time of light source, see col.8, lines 15-20), directs said charge readout part to periodically read out one line of the signal charges generated by said light receiving part, and prohibits illumination from irradiating in said illuminating device (Led light source of fig 7) while said irradiating in said illuminating device while image data of the original is output from said imaging device, (a step S802 discriminates whether a color or a monochromic copy operation is selected, and in case of color operation step S803 of fig 8, sets the light mode as to turn on the RGB light source, and incase of monochromic operation LED (RB) are turned of and turn on the (LED) G light source only, see (col.9, lines 60-68).

With respect to claim 13, Ohtani et al. disclose a data structure for coding and transmitting an image scanning program which causes a computer to execute the step of controlling an image scanning apparatus (the image forming apparatus of fig 7, is controlled and executed according to the program stored in a personal computer 1302

of fig 17) comprising: an illuminating device (LED 13,14 and 15 fig 7), for irradiating illumination on an original (201 of fig 2) an imaging device (image sensor 12 of fig 7) for reading out said signal charges from a light receiving part and outputting said signal charges as image data of the original, including said light receiving part for receiving light and for generating said signal charges, in which the light is an illumination irradiated from said illuminating device (LED 13,14 and 15 fig 7), and influenced by the original (201 of fig 2); and a controlling device, (CPU 1 of fig 1, in conjection with timing counter 703 of fig 7, for controlling the lighting time of light source, see col.8, lines 15-20), for directing said illuminating device to irradiate illumination, directing said imaging device (12 of fig 7) to read out the signal charge generated by said light receiving part, and prohibiting illumination (switch of or turn of RB, see below) from irradiating in said illuminating device while image data of the original is output from said imaging device (12 of fig 7), (a step S802 discriminates whether a color or a monochromic copy operation is selected, and in case of color operation step S803 of fig 8, sets the light mode as to turn on the RGB light source, and incase of monochromic operation LED (RB) are turned of and turn on the (LED) G light source only, see (col.9, lines 60-68).

With respect to claim 14, Ohtani et al. disclose image scanning apparatus (an image forming apparatus of fig 1), wherein said imaging device has a line sensor comprising a plurality of light receiving parts arranged in one dimension, (image reading computer to execute the step of: controlling an image scanning apparatus (fig 7) having an illuminating device (light source 113,14 and 15 shown in fig 7) for irradiating

illumination on an original (original 201 of fig 2) and an imaging device (line sensor 12 of fig 7) for reading out signal charges from a light receiving part and outputting said signal charges as image data of the original, (original 201 of fig 2) including said light receiving part for receiving light and for generating said signal charges, in which the light is an illumination irradiated from said illuminating device (LED light sources of fig 7) and influenced by the original (original 201 of fig 7); wherein said controlling step includes a controlling procedure for directing said illuminating device to irradiate illumination, see (col.16, lines 25-30), directing said imaging device (image forming device 1301 of fig 17), to read out the signal charge generated by said light receiving part, (image sensor (CCD) of fig 7), and prohibiting illumination (switch of or turn of RB, see below) from irradiating in said illuminating device while image data of the original is output from said imaging device, (a step S802 discriminates whether a color or a monochromic copy operation is selected, and in case of color operation step S803 of fig 8, sets the light mode as to turn on the RGB light source, and incase of monochromic operation LED (RB) are turned of and turn on the (LED) G light source only, see (col.9, lines 60-68).

Claims objected to having allowable subject matter

4. Claims 2-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

With respect to claims 2-4, the prior art does not teach or disclose the image scanning apparatus, wherein said illuminating device respectively irradiates upon the

original as the illumination, light to be shut out other than at the light receiving part of said image sensor and light having a long wavelength not to be shut out other than at the light receiving part of the image sensor; and said controlling device prohibits the light having a long wavelength from being irradiated by said illuminating device during the period in which the image data of the original is being output through the transferring unit of said image sensor.

With respect to claims 5-7, the prior art does not teach or disclose the image scanning apparatus, wherein said illuminating device respectively irradiates light upon the original as the illumination, to be shut out other than at the light receiving part of said image sensor and light having a long wavelength not to be shut out other than at the light receiving part of said image sensor; and said controlling device permits the light having a long wavelength to be irradiated by said illuminating device, prior to irradiation of the light to be shut out other than at the light receiving part of said image sensor, the light having a long wavelength irradiated during the period in which data not corresponding to image data of the original is being output through the transferring unit of said image sensor.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ***Negussie Worku*** whose telephone number is 571-272-7472. The examiner can normally be reached on 7am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ***Kimberly Williams*** can be reached on 571-272-7471. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free):

KA Williams

KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER

Negussie Worku
04/06/05